AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1. (Previously presented) An HMD device comprising an image-generating unit for generating a polychromatic image and deflection optics comprising first and second partial optics, said deflection optics projecting the image such that it is perceivable by a user wearing said HMD device, wherein the two partial optics each contain a diffractive optical unit for beam deflection, which are designed such that their dispersion errors compensate each other, and wherein the second partial optics are arranged in front of the eye of a user wearing the HMD device so as to allow the user to perceive his environment through said optics, and the second partial optics have a refractive effect for correction of visual deficiencies of the user wearing the HMD device and the second partial optics have a curved material interface facing the user's eye, and wherein the diffractive optical unit of the second partial optics is located on the curved material interface and wherein the first partial optics have a first optical axis and the second partial optics have a second optical axis and wherein the first optical axis is substantially laterally displaced from and substantially parallel to the second optical axis and the diffractive optical unit of the first partial optics deflects light to the diffractive optical unit of the second partial optics.

2. (Original) The HMD device as claimed in Claim 1, wherein use is made of a non-zeroth order of diffraction of the diffractive optical units for beam deflection.

3. (Original) The HMD device as claimed in Claim 2, wherein the same order of diffraction is used for both diffractive optical units.

4. (Original) The HMD device as claimed in Claim 1, wherein the diffractive optical unit of at least one of the first and second partial optics is provided as a line grating.

5. (Original) The HMD device as claimed in Claim 4, wherein the line grating serves the purpose of beam deflection.

6. (Previously presented) The HMD device as claimed in Claim 4, wherein the line grating serves the purpose of beam deflection and also as an imaging optical element.

7. (Original) The HMD device as claimed in Claim 6, wherein the grating constant of the line grating varies with respect to the imaging effect.

8. (Original) The HMD device as claimed in Claim 4, wherein the line grating is formed on or in a curved material interface.

9. (Original) The HMD device as claimed in Claim 8, wherein the material interface is spherically curved.

10. (Original) The HMD device as claimed in Claim 9, wherein said deflection optics comprise a refractive element having a first and a second side, said first side being said spherically curved material interface.

11. (Original) The HMD device as claimed in Claim 10, wherein said line grating formed on or in said spherically curved material interface is adapted to provide a desired aspherical effect.

12. (Original) The HMD device as claimed in Claim 4, wherein the line grating is formed on or in a planar material interface.

13. (Cancelled)

14. (Previously presented) The HMD device as claimed in Claim 1, wherein the user can see through the diffractive optical unit of the second partial optics in the zeroth order of diffraction.

15. (Cancelled)

16. (Previously presented) An HMD device comprising:

an image-generating unit for generating a polychromatic image;

deflection optics comprising first and second partial optics, said deflection optics projecting the image such that it is perceivable by a user wearing said HMD device,

wherein the two partial optics each contain a diffractive optical unit for beam deflection, which are designed such that their dispersion errors compensate each other;

wherein the second partial optics are arranged in front of the eye of a user wearing the HMD device so as to allow the user to perceive his environment through said optics, and

the second partial optics have a refractive effect for correction of visual deficiencies of the user wearing the HMD device and the second partial optics have a curved material interface facing the user's eye, wherein the diffractive optical unit of the second partial optics is located on the curved material interface; and

further wherein the first partial optics directs light to the second partial optics where the light is reflected and diffracted only from the curved material interface facing the user's eye to be directed to the user's eye.

17. (Previously presented) The HMD device as claimed in Claim 16, wherein use is made of a non-zeroth order of diffraction of the diffractive optical units for beam deflection.

18. (Previously presented) The HMD device as claimed in Claim 17, wherein the same order of diffraction is used for both diffractive optical units.

19. (Previously presented) The HMD device as claimed in Claim 16, wherein the diffractive optical unit of at least one of the first and second partial optics is provided as a line grating.

20. (Previously presented) The HMD device as claimed in Claim 19, wherein the line grating serves the purpose of beam deflection.

21. (Previously presented) The HMD device as claimed in Claim 19, wherein the line grating only serves the purpose of beam deflection and also as an imaging optical element.

22. (Previously presented) The HMD device as claimed in Claim 21, wherein the grating constant of the line grating varies with respect to the imaging effect.

23. (Previously presented) The HMD device as claimed in Claim 19, wherein the line grating is formed on or in a curved material interface.

24. (Previously presented) The HMD device as claimed in Claim 23, wherein the material interface is spherically curved.

25. (Previously presented) The HMD device as claimed in Claim 24, wherein said deflection optics comprise a refractive element having a first and a second side, said first side being said spherically curved material interface.

26. (Previously presented) The HMD device as claimed in Claim 25, wherein said line grating formed on or in said spherically curved material interface is adapted to provide a desired aspherical effect.

27. (Previously presented) The HMD device as claimed in Claim 19, wherein the line grating is formed on or in a planar material interface.

28. (Previously presented) The HMD device as claimed in Claim 16, wherein the user can see through the diffractive optical unit of the second partial optics in the zeroth order of diffraction.